"Adaptive Kalman Filtering for Anomaly Detection in Software Appliances"

 Availability and reliability are often important features of key software appliances such as firewalls, web servers, etc. In our paper we seek to go beyond the simple heartbeat monitoring that is widely used for failover control. We do this by integrating more fine grained measurements that are readily available on most platforms to detect possible faults or the onset of failures. In particular, we evaluate the use of adaptive Kalman Filtering for automated CPU usage prediction that is then used to detect abnormal behaviour. Examples from experimental tests are given.